

The Value of a Focus on Prevention and Whole Community Health: How Local Public Health Can Help

Lisa VanRaemdonck, MPH, MSW
Executive Director
Colorado Association of Local
Public Health Officials (CALPHO)

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CALPHO
Colorado Association of Local Public Health Officials

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Who is CALPHO?

- Association for Colorado's 54 local public health agencies
- State affiliate of the National Association of County and City Health Officials
- Voting members are the Directors of the local public health agencies

Vision and Mission

- **Vision:** CALPHO is instrumental in helping to ensure that Colorado is the healthiest state in the union.
- **Mission:** To bring together the leadership of local public health agencies in each county and other public health partners to create a constructive and collegial environment to foster an effective and efficient public health system and to encourage improvement in the quality, capacity and leadership of local public health agencies and public health professionals.
- **Approach:** Focus on areas of mutual interest where LPHAs can develop similar expertise and can organize statewide to advocate for additional resources and influence. Support LPHAs at the local level and act on behalf of LPHAs at the state level.

What you've already heard

- Social Determinants of Health
- Population Health Strategies
- CDPHE Population Health Tiers
- HCPF Colorado Opportunity Project
- Examples of prevention-focused programs/services

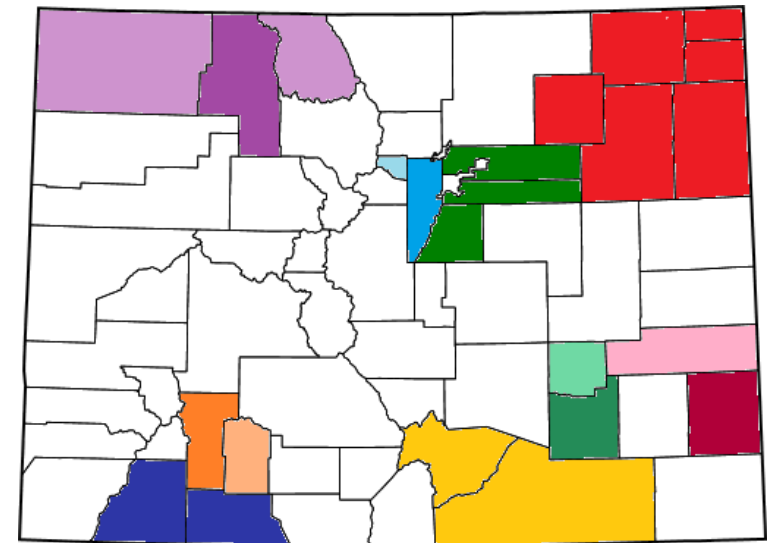
What you'll hear today

- Basics of the local governmental public health system
- A simpler way to think about prevention
- Specific examples of important health conditions and related public health activities
- Ideas on ways to fund prevention and whole community health work

Local Public Health Agencies

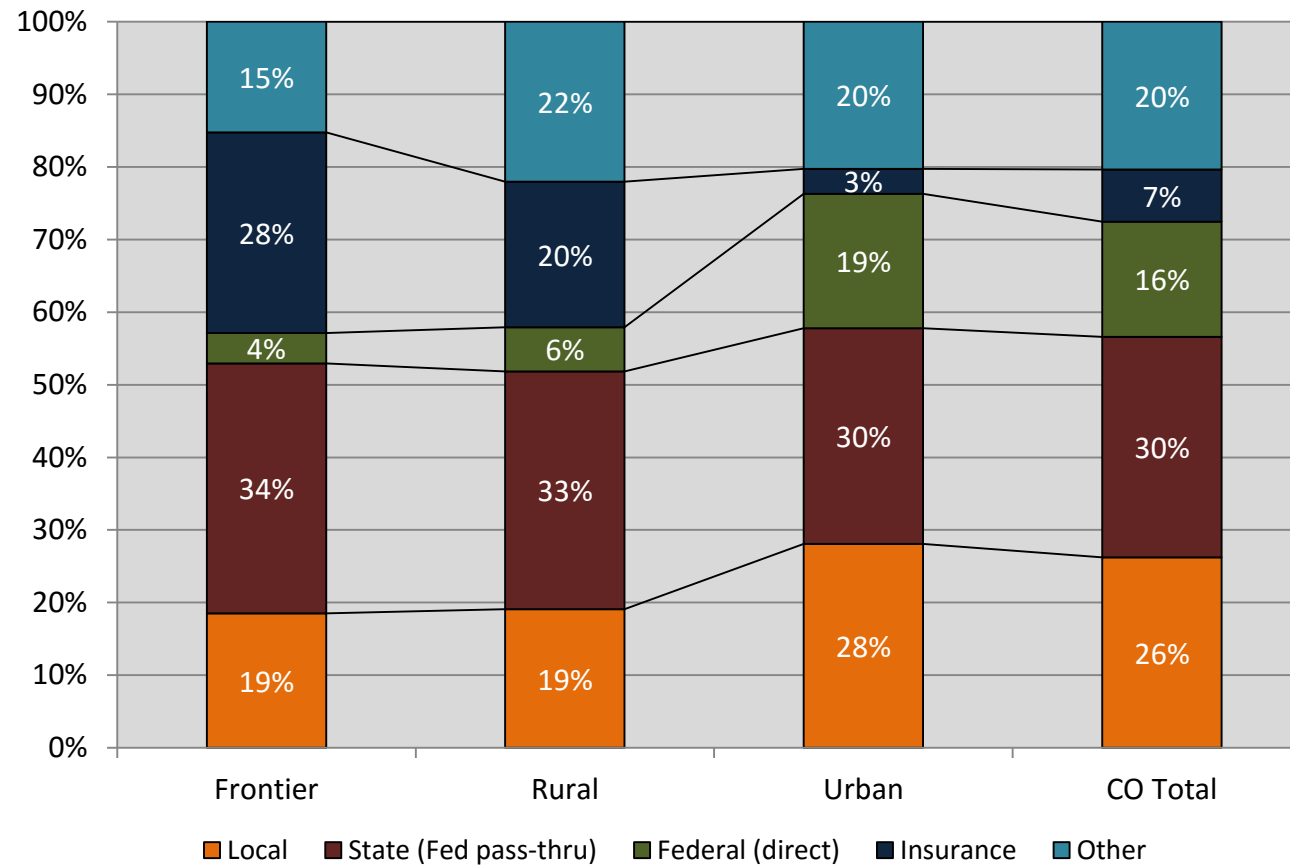
Who are Local Public Health Agencies?

- 54 local public health agencies serve all 64 Colorado counties
 - Largest serves 1.3 Million; Smallest serves around 700 people
- Employ more than **2,300 people** across the state
 - 21% of the workers are public health nurses
 - 19% are administrative and clerical staff
 - 19% are environmental health professionals
 - 7% are health educators.
- Governed by a Local Board of Health
- Perform a Community Health Assessment (CHA) every 3 yrs
- Create a Community Health Improvement Plan
- Provide a required set of Core Public Health Services
- Provide services and activities based on community need, available resources and capacity



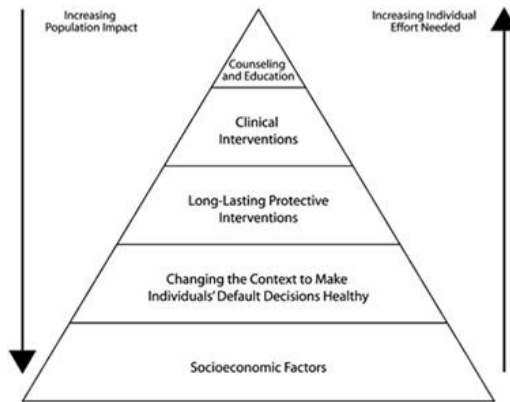
LPHA Funding

Local Public Health Funding By Jurisdiction Size, 2013

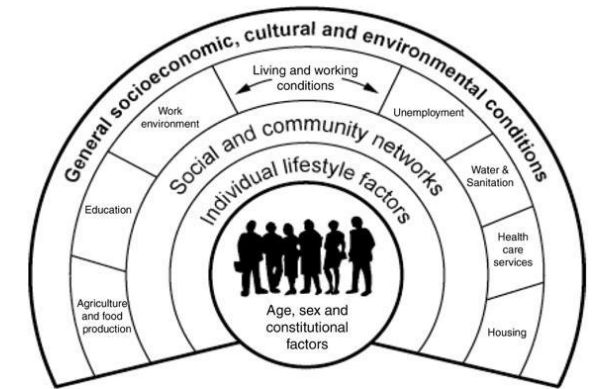


Prevention

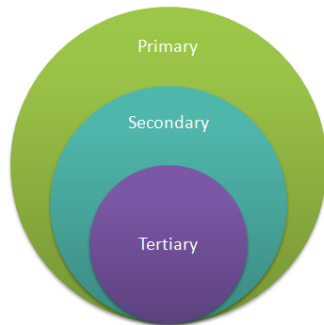
Prevention models



Preventing the need for medical treatment is a significant way to lower health care costs.



COST AVOIDANCE



A simpler way – The 3 Buckets



Community-Wide Prevention

- Mass communication campaigns
- Coalition building, community engagement, community organizing
- Changing the community environment
- Changing the social norms
- Data collection and analysis (surveillance)
- Focusing on communities that are most impacted (disparities)

Health Conditions

“High Burden” Health Conditions

- Asthma
 - Tobacco Use
 - Diabetes
 - Unintended Pregnancy
 - Others!
-
- Root causes and health inequities interplay with each of these conditions

Asthma

THE ISSUE

- About 350,000 Colorado adults have asthma, and 8.1% of children currently have asthma.²¹
- From 2002-2007, medical expenditures due to asthma hospitalizations and emergency room visits increased from \$48.6 billion to \$50.1 billion or about \$3,300 per person with asthma each year.²²
- The annual contribution of environmental triggers to asthma's economic cost is estimated to be \$16.7 billion, and these triggers contribute to other ailments like allergies and acute bronchitis.²³

THE SAVINGS

- An in-home mitigation intervention in Massachusetts cost about \$36,000 and saved an estimated \$76,000 in medical costs.²⁵
- An statewide analysis of Maryland's in-home asthma control services revealed a savings of \$8.1 million for environmental mitigation (and \$14 million for home-based environmental education).²⁶
- A Community Guide systematic review showed that every dollar spent on home-based, environmental asthma trigger mitigation saved between \$5.30 and \$14.00 in deferred medical and productivity costs for every dollar invested.²⁷

Asthma Prevention Activities

- Patient and family education about triggers
- Home visits by a nurse and environmental health specialist
- Community air monitoring and communication

Tobacco Use

THE ISSUE

- In Colorado, about 15.7% of adults and 8.6% of high schoolers smoke tobacco, contributing to 5100 deaths and about \$1.89 billion per year in medical costs.¹
- Tobacco use is a major risk factor for cancer, heart disease, stroke, lung disease, Type 2 diabetes, etc.

THE SAVINGS

- Washington State spent \$250 million on tobacco prevention and control over a decade, preventing 36,000 hospitalizations and saving \$1.5 billion in health care costs.²
About a 6 to 1 ratio
- California spent \$2.4 billion on tobacco control over 20 years, reducing health care costs by \$134 billion.³
About a 55 to 1 ratio
- Arizona spent about \$230 million on tobacco control over 9 years, reducing health care costs by \$2.3 billion.⁴
About a 10 to 1 ratio

Tobacco Prevention Activities

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Type 2 Diabetes

THE ISSUE

- About 29 million Americans have diabetes, and another 86 million are pre-diabetic.⁷
- In 2012, Diabetes (primarily Type 2) cost \$245 billion per year in direct medical costs and lost productivity, which was a 41% increase from 2007.⁸
- Lifetime medical costs for someone diagnosed with diabetes while between ages 25-44 is about \$130,000.⁹

THE SAVINGS

- The Diabetes Prevention Program (DPP), reduced incidence of diabetes by 58% compared to placebo.¹⁰
- Reviews^{11,12} of other lifestyle interventions show similar successes, even when only small progress is made on multiple risk factors, including weight and behavioral indicators.
- Centers for Medicare & Medicaid Services evaluated DPP, finding a savings of \$2,650 per enrollee for the first 5 quarters of the program. Their Office of the Actuary has since recommended expanding the program.¹³

Diabetes Prevention Activities

- Screening and referral
- Case management and Disease management programs
- Pre-diabetic lifestyle programs
- Obesity prevention (Healthy Eating and Active Living)

Unintended Pregnancy

THE ISSUE

- About 45% of pregnancies in Colorado were unintended in 2010, and about three quarters of teen pregnancies were unintended.¹⁴
- In Colorado, the medical care for about 64% of these pregnancies was publicly funded, costing about \$237 million.¹⁵
- Quality family planning education and services has health, economic and societal impacts, including helping women complete high school and college, enter and stay in the workforce, and encouraging good spacing between births.

THE SAVINGS

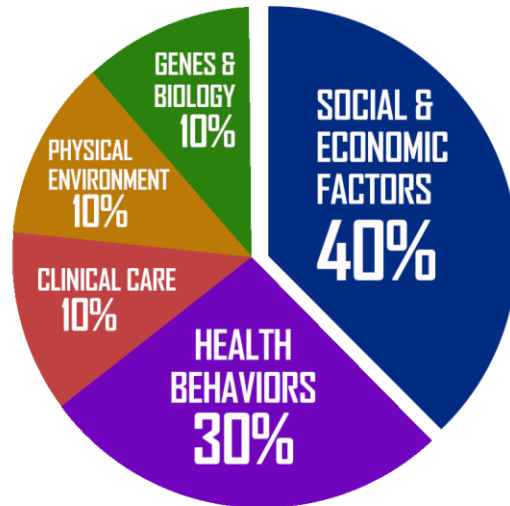
- Family planning services have an estimated ROI between \$7 and \$4 for every dollar spent.^{16, 17}
- Long acting reversible contraception (LARC) can reduce unwanted teenage pregnancy by about 80%¹⁷ and has an overall ROI of about \$6 for every dollar spent.¹⁸
- CDPHE estimates that efforts to reduce unintended pregnancies in Colorado between 2010 and 2012 saved between \$49 million and \$111 million in avoided Medicaid expenses.¹⁹

Unintended Pregnancy Prevention Activities

- Family Planning Education and Contraceptive Services
- Comprehensive sex education in schools
- Positive Youth Development programs

Root Causes and Determinants of Health

DETERMINANTS OF HEALTH



SOCIAL DETERMINANTS OF HEALTH

- Investments in education, housing, food access, employment, community connectedness and other determinants pay dividends
- Support of SDoH work does not have to mean poverty reduction as a primary activity
- This work can be interlinked with more traditional health care activities

Funding and Financing

Funding Sources

Prevention funding to support LPHAs and other community non-profits working on prevention and public health

- Wellness Trust
- Community benefit (hospitals/financial institutions)
- Taxes
- Fee for service/Billing models
- Grants
- Contracts
- Gifts/Donations

Funding Mechanisms

- Direct from or thru health care entities
 - Private insurance payers
 - Provider networks
 - RCCOs/ACOs
 - Hospitals
- Thru neutral, fiscal intermediaries
 - Colorado Foundation for Public Health and the Environment (CFPHE)
 - Associations
 - Donor designated fund at a Community Foundation
- Thru state agencies
 - CDPHE
 - HCPF

Overarching Recommendations

- Consider investments in governmental and non-governmental public health
- Recognize the public health system as an underfunded and underutilized resource for health care cost savings and avoidance
- Support “upstream” interventions
- Invest in scaling up current innovations and developing/adapting new programs
- Consider new and evolving funding options to support approaches at the community level
- Ask more about how we can help!

Thank You

- Lisa VanRaemdonck, MPH, MSW
- Colorado Association of Local Public Health Officials
- lisa@calpho.org

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